

Date: 3 April 2014

Ref: modular Approval (MA) Compliance Letter for FCC ID: JE4STAMP433

To: Federal Communications Commission

Subject: FCC ID: JE4STAMP433 MA compliance letter

This letter introduces Risco Ltd.'s request to approve its 433.92 MHz "Stamp", model # RWTRSS10433B-40 according to FCC Single Modular Approval procedure, and to demonstrate the means to control the module as required by the MA procedure.

The RWTRSS10433B-40 is "Stamp" that transmit in 433.92Mhz.

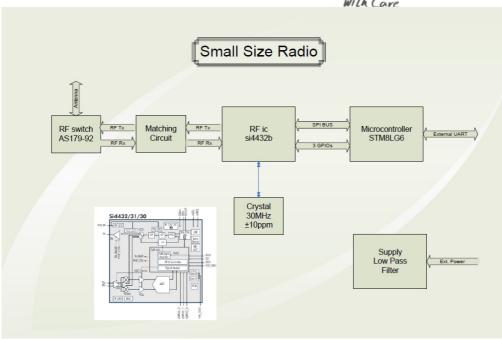
The Transceiver Si4432 is by Silicon Laboratories' highly integrated, single chip wireless ISM. It includes a complete line of transmitters, receivers, and transceivers allowing the RF system designer to choose the optimal wireless part for their application.

The Si4432 offers advanced radio features including continuous frequency coverage from 240–930 MHz. The Si4432's high level of integration offers reduced BOM cost while simplifying the

overall system design. Additional system features such as an automatic wake-up timer, low battery detector, 64 byte TX/RX FIFOs, automatic packet handling, and preamble detection reduce overall current consumption and allow the use of lower-cost system MCUs. An integrated temperature sensor, general purpose ADC, poweron- reset (POR), and GPIOs further reduce overall system cost and size.

The Si4432's digital receive architecture features a high-performance ADC and DSP based modem which performs demodulation, filtering, and packet handling for increased flexibility and performance. This digital architecture simplifies system design while allowing for the use of lower-end MCUs. The direct digital transmit modulation and automatic PA power ramping ensure precise transmit modulation and reduced spectral spreading ensuring compliance with FCC and ETSI regulations.





Based on the chart on the following pages, Risco Ltd. requests singular modular approval.



As per § 15.212 Modular transmitters:
Single modular transmitters must meet the following requirements to obtain a modular transmitter approval.

Requirement	Not Maintained	Maintained
(1) The radio elements of the	Tiot Maintaineu	YES
modular transmitter must have their		ILS
own shielding. The physical crystal		
and tuning capacitors may be located		
external to the shielded radio		
elements.		
		VEC
(2) The modular transmitter must		YES
have buffered modulation/data		
inputs (if such inputs are provided)		
to ensure that the module will		
comply with part 15 requirements		
under conditions of excessive data		
rates or over-modulation.		ATEG
(3) The modular transmitter must		YES
have its own power supply		
regulation.		
(4) The modular transmitter must		
comply with the antenna and		
transmission system requirements of		
§§15.203, 15.204(b) and 15.204(c).		AMEG
The antenna must either be		YES
permanently attached or employ a		
"unique" antenna coupler (at all		
connections between the module and		
the antenna, including the cable).		
The "professional installation"		
provision of §15.203 is not		
applicable to modules but can apply		
to limited modular approvals under		
paragraph (b) of this section.		



As per § 15.212 Modular transmitters:

Single modular transmitters must meet the following requirements to obtain a modular transmitter approval.

transmitter approval.	NT / N	36
Requirement	Not Maintained	Maintained
(5) The modular transmitter must be		YES
tested in a stand-alone configuration,		
<i>i.e.</i> , the module must not be inside		
another device during testing for		
compliance with part 15		
requirements. Unless the transmitter		
module will be battery powered, it		
must comply with the AC line		
conducted requirements found in		
§15.207. AC or DC power lines and		
data input/output lines connected to		
the module must not contain ferrites,		
unless they will be marketed with		
the module (see §15.27(a)). The		
length of these lines shall be the		
length typical of actual use or, if that		
length is unknown, at least 10		
centimeters to insure that there is no		
coupling between the case of the		
module and supporting equipment.		
Any accessories, peripherals, or		
support equipment connected to the		
module during testing shall be		
unmodified and commercially		
available (see §15.31(i)).		
(6) The modular transmitter must be		YES
equipped with either a permanently		
affixed label or must be capable of		
electronically displaying its FCC		
identification number.		
(7) The modular transmitter must		YES
comply with any specific rules or		
operating requirements that		
ordinarily apply to a complete		
transmitter and the manufacturer		
must provide adequate instructions		
along with the module to explain		
any such requirements. A copy of		
these instructions must be included		
in the application for equipment		
authorization.		



As per § 15.212 Modular transmitters:

Single modular transmitters must meet the following requirements to obtain a modular transmitter approval.

Requirement	Not Maintained	Maintained
(8) The modular transmitter must		YES
comply with any applicable RF		
exposure requirements in its final		
configuration.		

Thank you, Motti Barad, Certification Engineer RISCO Group

